BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF DELAWARE

IN THE MATTER OF THE APPLICATION OF)
DELMARVA POWER & LIGHT COMPANY FOR)
APPROVAL OF LAND-BASED WIND CONTRACTS) PSC DOCKET NO. 08-205
AS A SUPPLY SOURCE FOR STANDARD OFFER)
SERVICE CUSTOMERS)
(FILED JULY 28, 2008))

Preliminary Comments on Land-Based Wind PPAs

Jeremy Firestone 120 Unami Trail Newark, DE 19711 jf@udel.edu (302) 831-0228 (daytime phone)

Now comes **JEREMY FIRESTONE**

- 1. I intend to explore whether or not approval of the land-based wind power purchase agreements (PPAs) are in the public interest or whether alternatively Delmarva should explore additional "in-state" wind energy that could be provided by Bluewater wind. I may have additional comments after reviewing the PSC staff and independent consultant analysis of the PPAs and after conducting discovery, and reserve the right to supplement, my comments.
- 2. AES and Synergics each state that it has conducted bird and bat studies and other environmental studies and applied or obtained permits, but none of those studies, permits or applications have been provided as part of the application. Synergics makes the conclusory statement that ongoing studies on Four Mile Ridge are anticipated to reach conclusion similar to those reached at the other project location. The ridge is described as "high ridge" averaging 2700 feet in elevation. It is thus not clear that the two locations are similar and in any event, even nearby locations may have different environmental impacts, and a high ridge, raises concerns with avian impacts.
- 3. Synergics states that one of its projects will be placed on disturbed lands, but does not describe the lands when they were disturbed, in what manner, and what their present condition, etc., is today.
- 4. It is not clear from Delmarva's July 24, 2008 application what public outreach has or will be conducted for residents living in the vicinity of the Synergics

projects or with individuals who would otherwise be affected by the development of the proposed sites.

- 5. Delmarva asserts that "all regional renewable energy, when it is producing energy, has the same benefit of displacing the most costly form of generation being used in PJM at that time." That statement assumes that energy has no locational component. The other key to the statement is the phrase, "when it is producing energy," as not all renewable energy generators have the same match to load (compare solar, which is mostly available during the day or offshore wind, which benefits from a sea breeze. Because energy is priced on an hourly basis, when comparing two renewables, one must consider which months and times of day generation can be expected to occur. See Attachment 1, Willett Kempton, Comparing offshore wind power wind inland wind (10 April 2008).
- 6. Delmarva has asserted that it did not want to sign a larger PPA for offshore wind power and did not sign such a PPA because it did not need the energy to meet its load. Its application for land-based wind power PPAs would appear to be inconsistent with those statements. Differences in price cannot explain Delmarva's reluctance to negotiate a larger PPA as Delmarva's agent Frank Graves found that there was no material difference in the cost impact (each 2-4% per MWh) of the Bluewater Wind PPA and the land-based wind PPAs (each would have only "modest impact") on residential ratepayers.
- 7. While the transmission price impact was evaluated in the cross-comparison among the land-based wind bids, Delmarva has not disclosed the cost to transmit the power that would be provided under the land-based wind PPAs. This information is critical for an appropriate cross-comparison to be made between additional offshore wind energy from Bluewater Wind and wind energy under the proposed land-based wind PPAs.
- 8. The capacity factors for the Maryland PPAs are each .3493 (40 MW and 122,400 MWh; and 60 MW and 183,600 MWh). Those capacity factors are higher than the basis for the Bluewater Wind project (.319, based on 200 MW; 559,000 MWh, although Delmarva's consultant, Frank Graves pegs it at .45) and significantly higher than Pennsylvania PPA (.279).
- 9. The AES price in affidavits attached to the application state that the AES project offers energy at \$70/MWh. Schedule 8.1 however provides that the energy payment rate is \$68 or \$69 per MWh, depending on a condition subsequent.
- 10. Although wind profiles are discussed in the application, no data was provided to the public to evaluate the conclusions set forth in the application.
- 11. Delmarva selected the second and fourth rank bids, based in part on its desire to allocate a portion of the wind project energy production to Old Dominion

Electric Cooperative (ODEC). This criterion may have led Delmarva to select suboptimal bidders to negotiate with from its ratepayers' perspective.

- 12. Synergics does not have a credit rating and AES was rated less than credit worthy. Prior to the purchase of Bluewater by Babcock and Brown much was made of Bluewater's ability to finance the project; but here credit worthiness does not appear to have factored into the decision in any material way. Moreover, it is not clear from Delmarva's application why Synergics and AES were selected for entry into PPAs given that they were ranked ninth and tenth on non-price factors.
- 13. Frank Graves suggests that a hedge would be just as valuable as a long-term fixed price contract for land-based wind or offshore wind power, but does not explain how one hedges in 2008 against prices for natural gas, oil, coal and nuclear power two to three decades into the future.
- 14. The land-based wind contracts are for shorter time frames than the offshore wind contract and thus do not provide an equivalent amount of long-term price stability. For contracts that end in 15 years (approximately 2024) and those that end in 20 years (approximately 2029), Delmarva ratepayers will have to pay for an equivalent amount of replacement energy at whatever the market price for energy is during the period that runs from their expiration to approximately 2037-39, when the Bluewater contract will expire. Given longer term price stability provided by the offshore wind contract, the land-based wind contracts are inferior contracts from a rate stability perspective, all other things being equal.

Respectfully submitted,

Jeremy Firestone September 17, 2008